

A Work Project, presented as part of the requirements for the Award of a Masters Degree in Management from the NOVA – School of Business and Economics.

Management Consulting Labs – PT

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## 1. Brief Context

Portugal Telecom (PT) is a multinational telecommunication company based in Portugal with 85.5 Million clients spreaded over the world and with an EBITDA of 1492M€<sup>i</sup>. It is present in other Portuguese speaking countries through participations - 25% of total market value in both Oi (Brazil) and in Unitel (Angola). Those are the most relevant markets for PT's international growing strategy with revenues in 2010 of 10.000M€ and 1.143M€<sup>ii</sup> respectively.

In Portugal, PT markets different services (fixed, mobile, cable, Internet and voice) to every customer segment (residential, personal, Small and Medium Enterprises (SME), Corporate and Wholesale). Among its brand portfolio, PT has 3 main brands (Meo, Tmn and Sapo). The most relevant competitors are Vodafone and Optimus in the mobile service segment and Zon in the triple play service segment.

The telecommunications industry is very competitive and dynamic, with a high degree of competition that forces companies to be permanently innovating to create value for its shareholders. PT has been demonstrating over the years an ability to create new products as it is the example of MEO (case study in various universities<sup>iii</sup>) as well as by investing on technological innovation (new Data Center in Covilhã – 2011). Being aware of its importance, PT's investment had increased 200M€ in 2010 to 800M€<sup>i</sup>.

As part of the investment strategy, PT launched a new program in 2009 to analyze and to develop projects regarding new technologies, with good potential, which could be in the market place in the future. The projects had 3 different phases (Incremental, Exploit and Planned phases )<sup>i</sup> depending on the proximity of the potential return.

Among all the technologies analyzed, there was one called “Technology X” that had already been implemented successfully in a restrict number of activity sectors inside and outside Portugal. At the beginning, this technology had very high development and implementation costs, but more recently this disadvantage has been overcome due to the mass production of its different components. As a consequence, several specialized companies started to develop prototypes with “Technology X” with the Telcos’ support.

PT considered that there conditions to eventually sell “Technology X” to other activity sectors. However, it was not 100% clear to PT what could be the value generated and captured by this new technology.

In this context, PT asked Nova to analyze the potential of “Technology X” when applied in 9 different selected market opportunities in Portugal already selected by them.

## **2. REFLECTION ON CONTENT DONE FOR THE CLIENT**

### **2.1. Problem definition - Purpose and relevance of the project**

This project aimed at helping PT to assess the potential value created by “Technology X” when implemented in the 9 market opportunities and how it should position itself to have a good return in the short and medium term in Portugal.

These 9 market opportunities were defined mainly based on clients’ requests/needs and the size and the perceived potential of the market opportunity. The PT managers wanted to have a detailed quantitative and quality analysis of the business potential to support their overall strategy for the “Technology X” and establish priorities for the short-term.

With this challenge, the group decided to organize the task by putting the problem as follow:

Question 1 – What is the value created in each of the 9 market opportunities with “Technoly X” and what could be the return for PT?

Question 2 – What should be PT’s strategy in order to capture the maximum possible return?

Regarding question 1, PT wanted to know if in the selected market opportunities, the value created by “Technology X” was significant. PT also wanted to understand, taking in consideration the structure of the market opportunity, if it was possible to capture more value than the Average Return per Unit (ARPU) that a Telco uses to obtain.

In question 2, the objective was to define a go-to-market strategy for the market opportunities with highest potential for PT and to define its overall approach to this new technology. The outcome of this stage should be a list of recommendations to guide PT’s action in the near future.

#### **2.1.1. Benefit of hindsight**

In the first weeks when analyzing the different opportunities, our first reaction regarding question 1 was that the scope could be too wide, due to the significant number of market opportunities to analyze and the differences between them. On the top of this, there were few synergies between the work-fronts. Thus we felt the time was scarce to complete the project on time with the quality expected. Nevertheless, we worked hard to try to get a solid answer to the first question.

After reaching the overall conclusions for question 1, we came to the conclusion, when starting analyzing the answer to the question 2, that this one was not as important as the group thought at the beginning. Therefore the scope of the project was reduced and it was possible to accomplish the project on time: more time to question 1 compensated by a reduction in question 2.

As a conclusion, I consider that the problem presented by PT was well defined and with the supervisor's help we were able to structure the all project in a good way.

## **2.2. Hypothesis, Analysis and Work**

### **2.2.1. Approach to the Problem**

We defined 3 different hypotheses to answer the questions defined above – i. and ii. to answer question 1, while iii. to answer question 2.

- i. “Technology X” creates a significant value to several market opportunities in the short-medium term
- ii. PT is capable to capture an important stake of that value
- iii. If the previous two hypothesis are true, then PT should develop a go-to-market strategy

In order to test these 3 hypotheses, we organized the 13 weeks of the project in 4 different phases:

- I. Understanding the context of “Technology X” – Week 0
- II. Prioritization of the market opportunities – Week 1 - 4
- III. Deep analysis of the market opportunities prioritized – Week 5 - 10
- IV. General recommendations and Go-to-market strategy – Week 11 - 13

### 2.2.2. Project Development

#### **Phase I - Understanding the context of “Technology X” (Week 0)**

Objectives: 1) to get a first contact with “Technology X”: 2) to establish a good relationship with the client.

Before the kick-off meeting (first meeting of the project) the client provided us pre-readings that could help us to understand better PT’s proposal and also to understand the state of the art of the technology. Among these general information, we got access to the information about how the technology was functioning, knowledge about its value chain (eg: suppliers, competitors and potential partners) and also the different market opportunities where the technology could be applied.

The kick-off meeting started to assure and to demonstrate to the PT team, that Nova team was ready to work hard. This 1<sup>st</sup> meeting was relevant since it helped to create a good working environment and it facilitated the access to internal information required for the project.

Critical reflection: The pre-readings were too vague and oriented to the technical details. Probably, if they were more business oriented it would have allowed us to systematize better the information and to have more useful insights.

The analysis of all the deep dives was mandatory to be able to convince the clients about any potential strategy’s recommendations since it supported and illustrate with facts our strategy.

I would like to praise PT’s working team for their professionalism and friendly attitude during the entire project since the day 1. Their attitude was vital to the project’s success.

## **Phase II – Prioritization of the market opportunities (Week 1-4)**

Objective: to define the market opportunities with a higher potential for PT among all the opportunities created by “Technology X”.

PT presented us the 9 market opportunities. With our initial research, we understood that the potential of “Technology X” was beyond the market opportunities identified by PT. Therefore the team, after several brainstorming sessions, came with more market opportunities: 50.

The 50 market opportunities were then aggregated in 7 logical groups (aggregation of opportunities with similar characteristics) in order to facilitate the analysis and to help to easily classify a future market opportunity. The final outcome, using this approach, was also more coherent than the initial one presented by PT since the potential opportunities were larger and afterwards they were aggregated by market opportunities (eg: based on sector, ownership or function) with similar characteristics which became more homogenous.

Then, in order to facilitate the selection of the opportunities to be analyzed out of the 50, the team defined a set of criteria to assess and compare both the value created by the “Technology X” in general (X) and the part of the value that could be captured by PT (Y). In X, we analyzed the realistic potential for value creation in the short or medium term, also the monetization of the value created by the technology and finally a cost benefit analysis of development of a solution to a market opportunity. In Y, we identified market structure indicators such as competition rivalry environment, bargaining power of customers or other important value chain stakeholders, the threat of substituting products and also the capability and the conditions to develop partnerships.



All these criteria were illustrated through the presentation of good non-brainers examples of market opportunities that scored well and poorly in each criteria. It facilitated the comprehension and the decision of the 9 final market opportunities (putting aside 41) to explore in more detail.

Critical reflection: Regarding the work delivered, I consider that the enlargement and the selection of the opportunities allowed PT to organize and understand the context of the technology in a different way than they did before.

The criteria proposed was useful to accelerate the decision process and to give relevant insights to help PT to understand how they should elaborate an analysis in a more market oriented. This learning can also be applied in other technologies and markets.

I believe it was one of the best team's performances in the project. We delivered an excellent work, we worked as a team which allow to give a good image to the client.

### **Phase III – Deep analysis of the market opportunities prioritized (Week 5-10)**

Objective: to assess if there was an opportunity among the 9 market opportunities selected (i.e: if hypothesis i. and ii. were verified).

Despite the different characteristics of each market opportunity that required the usage of specific information, the general approach in this phase covered in 3 main points:

- Relevance of the opportunity: Definition of the scope of the project and its value-at-stake, identification of main stakeholders involved, benchmark of other alternatives to obtain the same benefit
- Cost-benefit analysis: Comparison of incremental benefit of “Technology X” with the better alternative

- Relevant factors to speed-up the process: Identification of specific factors of each market opportunity context that could be an advantage for the implementation of “Technology X” (eg: international case studies)

The information sources used by the group differed across the market opportunities depending on each specification.

The team presented 7 different detailed analyses with a final individual recommendation; this content was different from the 1<sup>st</sup> PR (Progress Review) because it gave practical insights of market opportunities they did analyzed yet and allow to have a overall perspective.

The client was surprised with the outcome of the 2<sup>nd</sup> PR, since it gave to PT pertinent insights they were not aware and a completely new perspective.

Critical reflection: Besides client’s opinion, I believe our team’s performance was bellow the expected on the 2<sup>nd</sup> PR: the quality of some deliveries could be better especially the power points and the team did not have enough time to prepare properly the presentation. Both affected the form we transmitted our messages and client’s comprehension of some market opportunities.

As main causes, we had troubles having access to the required information and the team showed lack of experience in 2 main areas:

Workload Management: Despite planning the tasks to be done in advance, we faced difficulties to strictly follow our plan and accomplish this phase on time. The team spent more time on the research and less on structuring the information and building a story line. As a consequence, we were under pressure to be able to finish it.

Work Fronts Management and problem solving: There were 8 different work fronts, and each team member was responsible for at least 2 of them. The work fronts had different characteristics so the synergies were low. On the top of that, each market opportunity required multiple consulting skills (eg: Research, structure information, issue identification and problem solving skills) which did not help the performance. Instead of asking for support within the group to leverage our skills, we relied too much on the supervisor's support and stayed focused on our work fronts– the team interaction was less frequent.

In the final week, the team was capable to reverse the situation and delivery a very good work.

#### **Phase IV – General Recommendations and Go-to-market Strategy (Week 11 – 13)**

After the deep-dives analysis, we verified that hypothesis i) and ii) were not verified in the majority of the market opportunities selected (7/9), therefore our proposal was that PT should position itself supplying the traditional service of a Telcos. This perspective was supported by case studies around the world.

Hypothesis i) was rejected in some market opportunities because:

- The value added of implementing “Technology X” was in some cases negligible
- Alternative solutions often provided cost-benefit trade-off
- The value created of “Technology X” was dependent on significant changes on the market opportunity context that most of the times required too specific know-how

There were relevant market obstacles that avoid PT entrance in the value chain of the market opportunity (hypothesis ii. was not verified), in those where “Technology X” brought relevant incremental value. As an example, there were opportunities too specialized so that only players with specific knowledge and already positioned in the market were able market the technology.

For the 3 remaining market opportunities (that for the client verified hypothesis i. and ii), we developed a go-to-market strategy.

**Critical reflection:** Regarding the recommendation for PT’s general strategy, I believe that our work had an important contribution for them to re-think their strategy for the technology since it was well structured and fact-based.

In the 3 remaining opportunities analyzed on more detail, our work gave new insights and a different perspective which will help them not only to re-define the strategy for these market opportunities but also PT know how to analyze future opportunities even regarding other technologies in a more business oriented way.

How was clients’ reaction to the main findings?

The top managers were able to understand and were pleasant with the main findings since their perspective were more holistic and focused on the cost-benefit analysis of the market opportunity. The findings gave them more information to invest in a more conscious way about the real value of “Technology X”. Also, the methodology used by the group, might be readapt to internal consulting projects.

Regarding the engineers and the managers who work in the project in a daily basis the project was also well received. They were conscious that our work could change what

they were doing so that they provide us helpful insights in the final presentation, even being assessed by the top managers. Their opinions tended to be more focused on the details of each opportunity than on holistic perspective, due to the nature of their daily work.

### 3. REFLECTION ON LEARNING

#### 3.1. Previous knowledge

At the beginning, I believed that I would apply more knowledge learnt along the Master than what it actually happened. Still, it was possible to apply the concepts of i) *Analysis of Industry and Competition* in the analysis of both the value chain and the market structure of different market opportunity (eg: market size, competitors, partnerships) ii) *Finance*, in the quantification of all market opportunities, I needed to calculate present values for different scenarios where concept/s such as discount factor or risk had to be considered and iii) *Project Management* in the planning and definition of different work fronts to be performed and its allocation per team member.

During the project, I found some difficulties identifying a problem and structuring it. In my opinion, the fact that the majority of the Harvard Case Studies analyzed during the master program drove us into a specific path through questions or frameworks did not helped me, in particularly. Probably, if some Harvard Case Studies did not have specific questions to answer it, would allow the students to be more creative and improve their issue identification skills.

Another aspect, I feel that might be improved is the feedback. In the majority of the courses the feedback that students received was only the final grade. During the project

I found very helpful to have a constructive and fact-based feedback which helped me to realize my improvements areas. I know that is hard for a professor to assess properly 40 students, that gap might be overcome through peers evaluation which I only verified in the course of Human Resource Management. These peers evaluation might have covered different areas such as presentation skills, content skills or even quality of the powerpoint.

## 3.2. New knowledge

### 3.2.1. Client Relationship Management

A) Trust Relationship: The client is the reason for the existence of the project. It is vital to establish a trustful relationship to create a good working environment and develop a professional image that can facilitate the attribution of future projects. This relationship was built based on *credibility*, elaborating a solid work, *reliability*, keeping the quality of the work over time and in all the deliveries, *empathy*, making the client satisfied to work with us, and *managing self interests*, balancing both parties ambitions to avoid conflicts and reaching a outcome that satisfies everyone.

In our project, the trust was harder to obtain and it took time since we were Master students working on relevant issue that many PT collaborators were also working on a daily basis. To get their confidence, it was vital not only to present a quality work but also to pay attention to small details taught by the supervisor (eg: utilizes client's layout in our presentations).

B) Progress Review planning: It is important to plan every detail of a meeting to ensure that nothing will affect the effective transmission of the main messages and to optimize the opportunity to be with the client. The process includes the i) *definition of logistical*

*aspects of the presentation* (eg: number of slides, time available, or meeting room) also, *ii) people that will attend to the meeting*, where the following questions should be answered to adapt the content: Who will be in the meeting, what are their position in the company, what do they know about this topic or what kind of questions could they have and how these questions can affect the meeting dynamic and the content; finally *iii) two way communication with the client* which includes any important decision for the project development, the definition of the following steps or the follow-up of the meeting conclusions.

In our project, the Progress Review planning was affected by the difficulty in knowing who would be present therefore the supervisor gave us indications to change PR's table of contents.

### **3.2.2. Methodologies and frameworks:**

During the project, we learnt several methodologies and frameworks (A) that helped to increase the effectiveness of our day-to-day work, the elaboration of final documents (B) and the way we communicate the main messages (C).

A1) Consulting Methodology: The process begins with the definition of a problem with client's contribution. Then, after some research about the topic the team identifies one or more potential solutions and develops a reasoning based on hypothesis that should be tested to confirm the validity of those solutions:

The solution should always be i) *hypothesis driven* since it avoids the waste of time searching for irrelevant information to solve the problem and it is possible to adjust the reasoning depending on the validity of the hypothesis ii) *fact-based* because it gives credibility to the solution and the top managers will only take into consideration this

solution if they thrust in the facts and in the sources iii) *structured* since it guarantees that all the important topics that help to solve the problem are covered in a exhaustive but clear form. The comprehension of the reasoning is much easier for someone that is reading the solution.

A2) 80/20: It was important to learn that the majority of the end result (80%) comes from a small part of the resources used (20%). By applying this rule it is possible to save time and energy without affecting significantly the final outcome.

A3) Triangulating information: Another important aspect was the triangulation of the quantitative values from different sources to give more credibility and confirm the hypothesis that were been tested. In our project, this aspect gained even more importance because there was not any clients' database to support our conclusions.

B) Communication: A relevant part of the consulting time is spent on ensuring that the client understands the main messages. The supervisor taught us how to use the *pyramid principle*, present the conclusion and only after explain its details, and to be *wordsmithing*, include only the relevant information to support the main message. Personally, I faced some difficulties to apply these communication tools.

C1) Story elaboration process: To aggregate all the information and avoid unnecessary time spent on research, it is important to develop a *storyline* with the hypothesis to be tested.

C2) Master elaboration: By drawing the slides on paper, we saved time in its elaboration and easily re-write a slide or re order the story comparing it if the process was done on Power Point.



C2) Self-explanatory document: Every detail of each document must be understood after the end of the project, therefore all the information must be explained without the intervention of the consultant - *double click*.

### 3.2.3. Team Management and its dynamics

A) Team leadership: His task was to ensure the project is in the

B) Team environment: The objective was the creation of a good working environment by i) establishing team rules for the team work (eg: duration of working day, limitations of each team member, team leadership rotations) ii) developing a good team spirit (eg: self-assessment of personal strengths and weaknesses and organization of conviviality moments outside the workplace).

C) Work tasks management: It was fundamental to divide the work in different work fronts but without losing the notion about overall purpose of the project. The project was extensive and impossible to cover if all the elements have the same task. Therefore, we needed to divide it in several work-fronts ensuring that it was possible to establish synergies between the different tasks.

Looking back, I was so focused on trying to complete my work front that I completely forgot to look to the project as a whole.

D) The feedback is the tool with most impact on our future performance, since it gave us constructive recommendations to improve our behaviors based on concrete examples of our working experiences. Personally, I think I took feedback in consideration too late so I was not able to improve my performance according to it.

### 3.3. Yourself

#### 3.3.1. Key strengths & weaknesses

This project was very helpful for me since I clearly identified my strengths and development needs with the contribution of the evaluators (colleagues, client and supervisor) I realized that I need to work on my development needs to develop a successful career in the near future.

- Research and issue identification: I can identify quickly the relevant issues and find interesting information about the problems I had at on hands.
- Emotional Intelligence: I had the capability to observe people's behaviours which allow me to take important conclusions about not only individual and group dynamics behaviors, and make me effective on building relationships with the client and giving constructive feedback.
- Team Player: Despite some of the difficulties I faced in the project, I was able to contribute to a good team dynamic and keep it motivated.

In the future, I would have to work on the following development needs:

- Issue structuring and dealing with ambiguity/ uncertainty: Despite being good at identifying the most important issues of a problem, I faced several difficulties in structuring it in a truly comprehensive and well-structure "issue tree". I was not able to write clear storyline. Looking back, I believed it happened due to difficulties in focusing on a task since the beginning to its end probably due to the work load in a short period of time.

- Written communication: My ability to draw a story-board were affected by the difficulties in issue structuring, also I feel that the slides I made should be more clear in order to better transmit the message proposed.
- Oral communication: I face difficulties to convince other people of my opinion. As far as I am an introvert person, I tend to be quieter in group dynamics and in the interaction with the client. This fact and the difficulties in issue structuring make my intervention confused and with low confidence.
- Dealing with pressure: Due to my previous development needs, when we are getting closer to the deadlines I face difficulties with the pressure because I feel that my work is not with the quality I wanted to be. It happened before the 2<sup>nd</sup> and the 3<sup>rd</sup> Progress Review and it affected the team environment and productivity.

To improve the issue structuring, I need to practice, use the frameworks learnt to summarize the information collected and pay especially attention to organization to be focused on each task until it be completely. It is important to fragment the main task in smaller tasks, develop a clear work plan in advance setting internal deadlines. I believe it will help me to minimize the time wasted and stay totally focused on the goal I propose to achieve.

Since I am a more introvert person I need to continue on improving persuasion and the capability to better transmit my opinion. Besides being more structured, the rehearsal is the most effective way to be excellent.

By working hard on the previous development needs, I believe I will feel even more prepared to deliver a top quality work and it will let me deal better with the pressure.

### **3.3.2. Future Career**

This project had been an excellent learning experience in a demanding, challenging and permanently changing environment and it helped me to realize I would most likely do not feel accomplished in a career in a consulting firm. With the experience of this project, I understood that I will need to be in a more constant environment to remain focused on single and more specific tasks.

## References:

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<sup>i</sup>Portugal Telecom - Relatório de Contas, 2010.  
(accessed January 2010)

<sup>ii</sup>BB Investimentos - Análise de Investimento OI  
<http://www.ini.org.br/Relatorios/blog2011/20110208/4T10OI.pdf> (accessed January 2010)

<sup>iii</sup> Portugal Telecom – Media  
[http://www.telecom.pt/InternetResource/PTSite/PT/Canais/Media/DestaquesHP/Destaques\\_2011/zbmeocasestudy.htm](http://www.telecom.pt/InternetResource/PTSite/PT/Canais/Media/DestaquesHP/Destaques_2011/zbmeocasestudy.htm) (accessed January 2010)